A Smaller, More Lethal Force:
Operational Art By An Outnumbered Army

A Monograph
by

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The criteria used to analyze campaigns of an outnumbered force come from the Clausewitzian theory of war. The concepts used are center of gravity, decisive points, attack and defense, and simultaneous and sequential operations. These concepts are discussed in order for the reader to better understand their influence on campaign design.

The Israeli Army campaigns of 1967 and 1973 serve as historical examples. Both cases illustrate a force that fought outnumbered and won. These two campaigns provide a contrast in campaign planning. Israel won in both wars, although the sphere of her victories differed.

This paper concludes that an outnumbered force can win a war against a larger enemy. Nevertheless, this force needs excellence in all facets of war, from strategic guidance to tactical execution. The small force must also recognize the elements of operational art in campaign design, thus ensuring effective use of the limited means available.
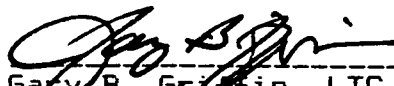
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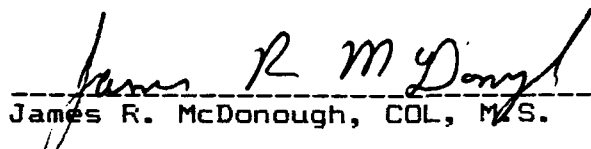
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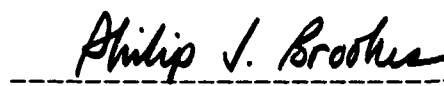
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ABSTRACT

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force needs excellence in all facets of war, from
strategic guidance to tactical execution. The small
force must also recognize the elements of operational
art in campaign design, thus ensuring effective use of
the limited means available.

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I. INTRODUCTION

Since 1976 the United States Army has believed that
it can fight outnumbered and win. That year Field Manual
100-5, <u>Operations</u>, advanced fighting outnumbered in the
defense as its basic premise.[1] While later versions of
this key warfighting manual restored the balance between
offense and defense, fighting outnumbered remained a
likely condition of war.[2] Further, emerging doctrine
assumed that U.S. forces would fight a nonlinear battle
with an enemy force of comparable size or larger.[3]
Clearly from the development of its doctrine, the United
States Army believed it could fight and beat a larger
army.

This monograph looks at operational art as executed
by an outnumbered force. Specifically, the research
question is: How have outnumbered armies designed and
executed successful campaigns? Fighting outnumbered and
winning is a high risk venture which requires near
flawless use of the principles of operational
art to succeed. Operational art as described in
contemporary U.S. Army doctrine can offer help in the
serious challenge faced by a small force opposing a
numerically superior one.

Three questions from FM 100-5 describe the design
of campaigns.[4] Changed slightly from their original
form, these questions form the subordinate research
questions used to develop evidence. First, what

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military condition must an outnumbered force produce in the theater of war or operations to achieve the strategic goal? Next, what sequence of action is most likely to produce that condition? Finally, how should an outnumbered force apply limited resources to accomplish that sequence of action? Simply, this monograph looks at how outnumbered forces achieve ENDS through WAYS with limited MEANS. The answers to these questions form the evidence for this monograph.

This study follows an organization of theory, history, and synthesis. The criteria uses concepts of the theory of war to analyze evidence including center of gravity, decisive points, attack or defense, and simultaneous and sequential operations.

The Israeli Army campaigns of 1967 and 1973 serve as historical examples. While both cases show a force that fought outnumbered and prevailed, each provides a contrast in campaign planning. It is, however, not the intent to describe these campaigns in detail beyond that required to support the analysis. But before drawing general conclusions from these examples, the context of Israel's wars needs review.

Israel's wars occurred within the context of restricted geography, time, and international pressures. First, Israel enjoyed advantages peculiar to the geography of the Middle East. In general terms, Israel fought over a limited area that compressed the spheres

of strategy, operations, and tactics. This was especially the case for the Golan Heights. Second, Israel needed to fight a short war. She did not have the population to field a larger force or fight a protracted conflict with heavy casualties. Israel's Arab opponents, on the other hand, had an extensive population and therefore the potential for large forces that could sustain greater losses. Finally, Israel fought knowing that superpower interests in the region would contain the conflict. It is clear that Israeli commanders understood how to conduct campaigns under these restrictions. It is also clear that they understood operational art as we define it. That does not mean their Arab adversaries did not understand operations.

Operational art is just as important to a large force as it is a smaller one. A numerically superior force that fails to employ concepts of campaign design can lose. Any conclusions drawn on the importance of good campaign design also applies to a large force. However, it is imperative that the outnumbered force have superior operational planning to offset the adverse force ratio.

The important operational lessons for an outnumbered force derived from this study are outlined in the conclusion. As an adjunct, this monograph also reviews the value of theory in campaign planning.

Nevertheless, before the historical narrative, the

theory of war concepts used as criteria require

discussion.

II. CRITERIA

> Theory then becomes a guide to anyone who wants to learn about war from books....It is meant to educate the mind of the future commander, or, more accurately, to guide him in his self-education, not to accompany him to the battlefield....
>
> Clausewitz, On War

Using the above quote to start a discussion of

criteria is appropriate. Four concepts of the theory of

war make up the analytic criteria: center of gravity,

decisive points, the relationship of attack and defense,

and simultaneous and sequential operations. Carl von

Clausewitz discussed these concepts in his brilliant but

unfinished book, On War. Though his book is over 150

years old, Clausewitz's work still has powerful

relevance today. Using his concepts as a guide

should reveal how an outnumbered force wins by

balancing ends, ways, and limited means. While

these theoretical concepts interact in war, one

plays a key role -- the center of gravity.

Clausewitz wrote that war plans must focus on the

enemy's center of gravity. The first reference to the

center of gravity is the battle. The second and most

useful reference to center of gravity is the

concentrated power of armies. In developing his thoughts

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on war, specifically the role of the engagement, Clausewitz introduced the theory of the center of gravity.

To develop a theory of war, Clausewitz began by reducing war to its simplest parts. In Clausewitz's view, fighting is the essence of war. Therefore, the battle fought by the main force is the center of gravity of the war.[5] Further, both sides of a war commit the largest concentration of their strength to this battle. As such, this battle of decision becomes the "provisional" center of gravity of the campaign.[6] As Clausewitz's describes the main battle as the center of gravity, another element is always present -- the mass of the opponent's army.

The main body of the enemy armed force is the second way Clausewitz described center of gravity. And as his theory developed, his definition of center of gravity became more refined. Clausewitz states:

A center of gravity is always found where the mass is concentrated most decisively. It presents the most effective target for a blow: furthermore, the heaviest blow is that struck by the center of gravity.....It is therefore a major act of strategic judgment to distinguish these centers of gravity...and to identify their spheres of effectiveness.[7]

Clausewitz narrows his definition of center of gravity in his chapter on war plans. For example, in campaign planning, one must consider the characteristics of the opposing armies. These characteristics will reveal a center of gravity, "the

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hub of all power and movement, on which everything depends."[8] This center of gravity then becomes the focal point of the campaign.

A useful summary of Clausewitz's center of gravity concept is:

At the operational level we create a center of gravity when we concentrate our subordinate maneuver formations. This creates a concentration of potential combat power.[9]

The center of gravity definition in FM 100-5 is also useful: a "source of strength or balance." Destroying the enemy's center of gravity thus produces the greatest results and likelihood of success. Losing this source, the enemy's entire force begins to come apart, "producing a cascading deterioration in cohesion and effectiveness."[10]

Therefore, the outnumbered force must make this major strategic judgment of correctly identifying the center of gravity when developing its campaign plan. The outnumbered force must then concentrate its limited resources against this center of gravity. Correctly identified, the next step is deciding how to attack the center of gravity.

The decisive point offers a way to get at the enemy's center of gravity. While Clausewitz understood the relationship between the center of gravity and the decisive point, he did not formally define the latter. However, he did offer that relative superiority of

strength must concentrate at the decisive point. This is true even when an absolute superiority of strength is impossible.[11]

While still not defining a decisive point, Clausewitz stated that choosing the correct decisive point helps achieve relative superiority. Picking this point during the planning process comes from "the resolution needed to sacrifice nonessentials for the sake of essentials."[12] Another theorist of Clausewitz's era provided a better definition of decisive points.

The Swiss theorist Baron Henri Jomini defined decisive points more fully in geometric and geographic terms. He stated that three factors determine a decisive point: features of the ground, relation of local features to the strategic aim, and positions occupied by the respective forces.[13] Of the many points Jomini named, the decisive strategic point is most important. In fact, a decisive strategic point can potentially have a marked influence on battle or campaign results.[14] Said another way, a decisive point provides a force with a marked advantage over its opponent. Therefore, holding this point will theoretically decide the outcome of the action. The decisive point also forces a decision on the commander who must decide to either seize or defend this decisive point. He also must decide how much force he will use in keeping or capturing this point.[15]

As Clausewitz points out, the correct identification of the decisive point offers the outnumbered force a degree of relative superiority. Armed with the knowledge of the decisive point, the outnumbered force then masses its strength against it. In doing so, it causes the most destruction and dislocation of the enemy's center of gravity. As with the center of gravity, the outnumbered force must also select the correct decisive point on the first try. Therefore, application of force at the correct decisive point enables the outnumbered force to destroy the enemy at a rate that ensures the collapse of his center of gravity. Nevertheless, the outnumbered force must also select the form of war that best helps this process.

Attack or defense are the two forms of war available in operational design. Clausewitz develops his argument around the proposition of the interdependence of these forms. Where two ideas, like attack and defense, are the logical antithesis of each other, then one form implies the other.[16] This relationship is clear in Clausewitz's description of the defense. He calls it "not a simple shield, but a shield made up of well directed blows."[17] However, Clausewitz sees a difference in strength between attack and defense.

By its nature, defense is theoretically the stronger form of war. Clausewitz makes this assertion based on three factors. In the engagement, the defense enjoys the advantages of surprise, terrain, and concentric attack.[18] Further, fighting forms the basis of defense, whereas the nature of attack is possession. Therefore defense is the stronger form since it is based on fighting, the essence of war.[19] Then to make up for its size, the outnumbered force should defend to capitalize on the inherent advantages of this form of war. Regardless of the inherent strength of the defense, the object of the war also influences the form of war used.

While defense is the stronger form, it has a negative object as its principal aim. Clausewitz characterized this negative object in his concept of the defense as awaiting and parrying the blow. Therefore, one should defend only as long as forced to by circumstances. When there is enough strength to attack, one must pursue a positive object. To Clausewitz, remaining in a defensive posture contradicts the very idea of war."20 Therefore, in order to prove decisive, transition to the attack must eventually occur.

Although the attack pursues a positive object, it always stays closely tied to the defense. In Clausewitz's theory, strategic attack is "thus a constant alternation and combination of attack and

defense."[21] Clausewitz also warns that if a successful

defense can imperceptibly turn into an attack, the

reverse is also true.[22] Looking at the relationship of

attack and defense, the outnumbered force must use the

strength of combining forms. Using a combination of

attack and defense, therefore, implies the use of force

over time.

The outnumbered force must now decide on the

simultaneous or sequential use of means. Clausewitz

talks at length about the simultaneous use of force at

the strategic/operational level. In his judgment,

large forces used simultaneously provide a greater

chance of success.[23] Further, simultaneous use of

forces inherently brings a decision earlier in a

campaign, a critical fact for the outnumbered force.

Therefore, all parts of the army must act since "even

the least appropriate task will occupy some of the

enemy's forces and reduce his overall strength...."[24]

However, Clausewitz cautions that simultaneous use of

force is not the only course.

When war consists of a "lengthy interaction of

mutually destructive forces," successive or sequential

use of force is also possible.[25] Nevertheless, the

outnumbered force may have another alternative -- a

combination of both means. Combining simultaneous and

sequential use of force can create favorable conditions

for the tactical battle.

These concepts -- center of gravity, decisive
point, attack and defense, simultaneous and sequential
operations -- form the criteria for this analysis of two
successful campaigns fought by an outnumbered force.
These theoretical concepts are important to any army,
but to the outnumbered forc understanding them is
critical.

In summary, faced with fighting a war with limited
means, the outnumbered force must act correctly or
suffer defeat. Selecting the correct center of gravity
and decisive point is absolutely critical. Further, the
campaign plan must include the form of war used, attack
or defense, and the simultaneous and sequential use of
force over time.

The Israeli Army fought two successful wars while
outnumbered. The campaigns of the Arab-Israeli Wars of
1967 and 1973 provide interesting contrasts in the use
of the theoretical concepts described above. While both
campaigns succeeded, the level of success varied.
Nevertheless, analyses of both campaigns provide
important lessons for successful warfighting by an
outnumbered force.

III.   Israel 1967.

Where the weaker side is forced to fight against
odds, its lack of numbers must be made up by the inner
tension and vigor that are inspired by danger.

Clausewitz, On War

Strategic Context

After nearly ten years of uneasy peace between

Israel and her Arab neighbors, war broke out in the

summer of 1967. During the summer of 1966, Palestinian

guerrillas had launched repeated attacks on Israel from

bases in Jordan. In November 1966, Israel struck back,

conducting raids on suspected guerrilla bases. Six

months later, Syria again conducted heavy artillery

attacks on Israeli villages. Israel responded with air

strikes bombing guerrilla bases and shooting down six

Syrian aircraft with no Israeli losses.[26] However, the

major threat did not appear along the Syrian border but

on Israel's' southern frontier -- in the Sinai

Peninsula.

By the spring of 1967 it was clear that Egypt was

taking steps that would lead to war. During May Egypt

moved 100,000 troops into the Sinai, ejected the United

Nations peacekeeping forces, and closed the Straits of

Tiran to Israeli shipping. Israel made it clear that it

considered the latter grounds for war. Other Arab

nations also mobilized forces and hastily sent them to

the Sinai. By the end of May, Israel faced an Arab army

consisting of 250,000 troops, 2,000 tanks, and some 700

combat aircraft (See Chart 1 in Appendix A).[27] Aware of
the imbalance in military men and material between the
Arab and Israeli armies, the world watched for the
expected destruction of Israel.

Israeli Campaign Design   (Appendix B)

Ends. The 1967 Israeli campaign had to create the
military conditions necessary to achieve the strategic
goal of ensuring Israel's survival. A viable and secure
Israel was the desired strategic end. The Arab end was
to destroy Israel and create a Palestinian state.
Israel's lack of strategic depth and its limited means
made it vulnerable to a coordinated Arab offensive. As
a result, the Israelis had to select an operational end
that would disrupt a decisive Arab attack. This would
allow Israel to concentrate on one front, hold on
another, and then shift forces as needed.[28] To pursue
this end, the Israelis had to identify the Arab center
of gravity.

Israel focused its pre-war plans on the Egyptian
Armed Forces and did not foresee a multi-front war.
Fortunately, the conditions of the multi-front war in
1967 did not change the choice of center of gravity.
The IDF analysis showed that the principal threat to
Israel was Egypt.[29] Specifically, the Egyptian Sinai
Army's armored reserve was the operational center of
gravity.

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The Israeli selection of the enemy's principal armored force as its center of gravity fits with the definitions of the term. Clausewitz would approve of this choice in that it correctly identified the mass of the enemy's potential combat power. This Arab center of gravity clearly threatened the Israeli center of gravity. Further, this center of gravity provided the Israelis the opportunity for operational, if not strategic success. By destroying the Egyptian armored reserves, Israel could start the disintegration of the entire Egyptian Army. Selecting the Egyptian forces as the center of gravity also fits with definitions from contemporary U.S. Army doctrine.

FM 100-5 includes the possibility of alliance cohesion as a center of gravity.[30] The Israelis correctly assessed the Arab coalition would collapse if they defeated the strongest army. Not only would the coalition break up, but any military coordination would also disintegrate. While Israel did not expect to fight on several fronts, selecting Egyptian forces was correct to meet that possibility.[31] Having made the destruction of the Egyptian Sinai Army its objective, the Israelis then assigned the means to accomplish it.

Means. Israel went into the 1967 Seven Day War
facing a numerically superior enemy. Further, the Arab
coalition could potentially mobilize even more force
than they put in the field initially.

Official figures of Israeli strength are not
available. However, estimates show that a fully
mobilized Israel could field 275,000 troops, 800 tanks,
and 197 combat aircraft (See Chart 2 in Appendix A).[32]
While smaller in numbers, the Israelis clearly had other
advantages.

The Israeli Defense Force (IDF) had many
qualitative advantages in personnel and doctrine over
its Arab opponents. First, the IDF soldier had a much
higher level of education, enabling him to employ modern
weapons effectively. Consequently, small unit
leadership also enjoyed this advantage. The quality of
Israeli senior civilian and military leadership also
surpassed that of the Arab forces.

These qualitative advantages enabled Israel to
develop and execute mobile warfare doctrine. This type
of warfare allowed considerable discretion to small unit
leadership that could capitalize on both initiative and
unforeseen tactical and operational opportunities.[33]

Ways. Israel had its choice of the two forms of
war, attack and defense. This choice had to account for
two critical factors. First Israel's lack of strategic
depth meant that an enemy on its borders could threaten

the whole country. Therefore, to reduce her
vulnerability and to gain depth, Israel had to take the
war into the enemy's depth.[34]

The second factor was time. Because of Israel's
smaller population and limited resources, it could not
fight a protracted war of attrition. However, Israel
could mobilize faster that its enemies.[35] To exploit
this ability, Israel had to act before the armies of the
Arab nations could fully mobilize. In summary, lack of
depth, and the need for a short war, led Israel to opt
for a strategic pre-emptive attack. Two other factors
also influenced this choice.

Qualitative superiority and central position made
Israel favor the offense. As discussed earlier, the IDF
enjoyed a qualitative advantage in personnel over its
enemies. Recognizing this fact, the Israelis created
units and doctrine designed to execute highly mobile
warfare based on the striking power of tanks and
aircraft. Additionally, their doctrine emphasized rapid
offensive action on multiple fronts.[36] Also supporting
Israel's offensive strategy was its central position in
relation to its enemies.

The geography of the Middle East positioned Israel
between her enemies. While this central position has
the hazard of encirclement, it does have advantages.[37]
The central position provides Israel with short,
interior lines of communications that helps economy of

force measures. Therefore, Israel could hold on one front, concentrate on another, and rapidly shift forces as required. In contrast, because of their physical separation, the Arab armies could not shift forces between fronts.

All the factors discussed so far led Israel to forego the theoretically stronger form of war, the defense. It is, nevertheless, important to point out that Israel conducted a strategic defense with an operational offense. Once again, it bears repeating that Israel's strategic goal was the preservation of the country. Her operational goal, however, was the seizure of territory that would provide a protective buffer. The nature of Israel's strategic and operational goals allowed her to capitalize on the advantages of both forms of war.[38] Having chosen the operational offense, Israel could complete its campaign plan.

The original Israeli campaign plan for the Sinai sought to achieve limited objectives. By short, limited attacks, the Israeli Army would seize the Gaza Strip and the northern Sinai. Israel would then use these areas to bargain for Egyptian withdrawal and the opening of the Straits of Tiran. However, Moshe Dayan, the newly appointed Minister of Defense disagreed with this plan. He felt that the attack should "destroy the Egyptian Army in the Sinai rather than bargain for its withdrawal."[39]

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Dayan's view was correct in Clausewitzian terms. An attack with limited objectives would not threaten the Arab center of gravity. The threat or actual destruction of that center of gravity would clearly do more to achieve Israel's ends. Therefore, the final Israeli plan aimed to attack and destroy the Egypt Sinai Army.

While the Southern Command concentrated on defeating Egypt, the Northern and Central Commands took up a defense. To threaten the operational center of gravity in the Sinai, Israel designed its campaign using decisive points. These decisive points provided focus for each phase of the campaign. The phases were: penetration, defeat of the second defense line and armored reserves, and advance to the Sinai passes to cut of the Egyptian Army.[40]

During the penetration phase, Israel chose three decisive points. In the north, one ugdah, a division sized unit, would attack to seize El Arish. This attack would unhinge the north end of the Egyptian defensive line. In the center, another ugdah would penetrate rough terrain to cut lateral routes, preventing movement of Egyptian reserves. The southern ugdah attacked to seize the Abu Ageila/Umm Katef crossroads.[41]   Holding these crossroads would prevent the Egyptians from moving their operational reserves, and bypass the bulk of the .pa Egyptian defenders. Further, if successful the

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Israelis would have routes into the Egyptian rear.
Seizing these decisive points set the conditions for the
next phase.

The Egyptian defenses near Gebel Libni
constituted the decisive point for Israel's second
phase. The significance of the Gebel Libni area was
that the northern two Israeli ugdahs would join here.
Once combined, this force would defeat the two Egyptian
armored divisions located in this area.[42] Having
defeated the operational reserve, the Israelis could
then cut off remaining Egyptian units.

The passes across the central mountains of the
Sinai were the decisive points in the third phase.
Capturing these points would cut off the Egyptian Army
in the Sinai. Having these passes, the Israelis could
take advantage of the strength of the tactical defense.
Combined with tank fires on the ground, the Israeli Air
Force would destroy the Egyptian Army as it tried to
escape through these passes.[43]

In the Sinai, the Israeli commanders had designed a
campaign around decisive points that uncovered the Arab
center of gravity. Therefore, the Israelis could mass
their combat power at these points and achieve relative
superiority. Another part of this design directed the
timing of the Israeli actions.

The Israeli campaign design also included simultaneous and sequential use of means, clearly falling within the parameters of Clausewitz's theory.[44] Israel employed all her available force to her strategic and operational plans. Engaging Arab units on all fronts -- the Sinai, Old Jerusalem, and on the Golan Heights -- disrupted any mutual support or coordination. However, sequential use of force also occurred.

The simultaneous use of force implied sequential use for Israel. Since Israel could not win the war in a single battle, the committed forces had to conduct a sequence of battles over time. Given Israel's limited means, all forces took action by either attacking or defending. After beating the Egyptians in the Sinai, Israel planned to shift forces to the Central or Northern fronts to deal with the Jordanians or Syrians as necessary. This multi-front war required sequential operations, the Sinai campaign phases are an example. Sequential operations allowed the Israelis to mass combat power for each phase. Thus, as with attack and defense, the Israelis gained an advantage by using a combination of simultaneous and sequential operations.

Summary

Israel's campaign design for the 1967 war proved decisive. The 1967 campaign achieved success beyond that thought possible by many, including the Israelis. The campaign correctly used elements of operational art

including center of gravity, decisive points,
simultaneous and sequential operations, and attack or
defense.

Clausewitz's theoretical concepts served Israel
well in her campaign planning. Planners identified the
strategic center of gravity of the Arab coalition, the
Egyptian Army. Further, the campaign plan focused on
the operational center of gravity, the Egyptian armored
operational reserves. Israeli commanders fully
understood that destruction of these Arab centers of
gravity would lead to success. Limited offensives that
did not threaten the center of gravity simply could not
succeed. Further, a limited offense would waste
Israel's limited assets to no end or purpose. It is
also clear that the Israeli campaign plan included
decisive points to uncover the Arab center of gravity.

The campaign plan identified decisive points where
Israel massed superior combat power. Further, the
decisive points followed a logical progression. This
progression set the conditions for the tactical battles
that ultimately led to the destruction of the Egyptian
Army.

The combination of attack and defense took full
advantage of the strengths of both forms. The Israelis
conducted a strategic defense and an operational
offense. Additionally, they took advantage of the
tactical defense within the operational offensive

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campaign (as at the Sinai passes). Similarly, the
lethal combination of simultaneous and sequential
operations fully supported the Israeli campaign
principal objectives.

In the 1967 war, Israel showed the world how an
outnumbered force could defeat a larger opponent in
modern war. Even though an ineffective Arab performance
aided them, it was clear that Israel achieved a decisive
victory. Israel's use of theory in campaign design made
a significant contribution to her success. In her 1967
victory, Israel had set a standard of operational
success for her future conflicts.

IV. The War of Atonement, 1973.

In practice, the size will be decided by the
government. ...the general who is to command the army
in the field usually has to accept the size of his
forces as a given factor.... Consequently, the forces
available must be employed with such skill that even in
the absence of absolute superiority, relative
superiority is attained at the decisive point.

Clausewitz, On War

The period between the 1967 and 1973 Arab-Israeli
Wars was one of violent peace known as the War of
Attrition. Egypt, Syria, and Israel routinely traded
artillery fire and commando raids along the Suez Canal
and the Golan Heights. In fact, Egypt had begun to
prepare for the next war as early as 1968.

Aided by the Soviets, Egypt rebuilt its air defense
system to defend against the Israeli Air Force. Egypt
also fielded the Sagger anti-tank missile system to cope

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with Israel's armored units. By these two actions, Egypt had countered the two principal Israeli military strengths that had dominated the 1967 war.

The Egyptians thus designed their campaign to take full advantage of their military strengths to win a limited victory. Under the Arab plan the Egyptian and Syrian armies would attack simultaneously to limit Israel's response. After seizing limited objectives in the Sinai and Golan Heights, the Arabs would set up defensive positions under the cover of anti-aircraft and anti-tank missile screens. The Arabs would then call for a cease-fire and negotiations with Israel. Additionally, the Egyptians conducted a well-coordinated deception plan, including routine military activities and diplomatic steps, to hide their war preparations.

Tensions mounted during the late summer and fall of 1973. In September, Israeli and Syrian Air Force fighters clashed. Syria lost thirteen aircraft to Israel's one. Under the guise of a response to the air battle, Syria mobilized and massed her army on the Golan. At the same time as part of her deception plan, the Egyptian Army conducted exercises near the Suez Canal.[45] The Arab deception plan worked. Surprised by the Arab attack, Israel was again at war.

Israeli Campaign Design (Appendix C)

Ends. The results of the 1967 war changed Israel's strategic options, giving her more depth for defense. This depth also meant that an Arab attack did not immediately threaten Israel's existence.[46] Therefore, Israel could conduct its defense differently from previous Arab-Israeli wars. Israel's 1973 war aims reflected the new options.

Israel first sought to deter an Arab attack. If deterrence failed, Israel wanted to prevent the Arabs from capturing terrain by gaining air superiority and then destroying Arab forces. Further, Israel wanted to capture additional Arab territory as a bargaining chip.[47] The Israeli General Staff had to design a campaign to meet these war aims.

As in 1967, the Arab armored forces remained the center of gravity that Israel would target, this time including the Syrian armor. Ideally, destroying this center of gravity would produce the same effects as in 1967. Israel would first cause the Arab coalition to collapse, providing the freedom to capture additional Arab territory. As in 1967, Israel's 1973 campaign plan correctly focused on destroying the Arab center of gravity. Nevertheless, Israel once again faced a larger enemy force.

Means. Once again, the Arab coalition, with Egypt

and Syria as the leading nations, outnumbered Israel.

Initially facing the IDF in the Golan, Syria fielded

three infantry and two armored divisions, plus many

separate brigades. The Syrian force had nearly 1,500

tanks when the war began.[48] Iraq, Jordan, and Saudi

Arabia would ultimately send forces to join the Syrians

on the Golan Front.

In peacetime on the Golan Heights, Israel stationed

two brigades consisting of 177 tanks and 11 artillery

batteries. This small force would face the initial

brunt of any Syrian attack. A similar situation existed

in the Sinai.

The Egyptian Army took the field in large numbers.

The Egyptian first line consisted of five infantry

divisions and several independent brigades. Three

mechanized and two armored divisions made up the second

line. In all, the Egyptian Army fielded 800,000 troops,

2,200 tanks, and 2,300 artillery pieces. Additionally,

the Egyptians deployed 150 anti-aircraft missile

batteries and 550 first line aircraft.[49] Against this

large Egyptian Army Israel deployed a relatively meager

force.

The Israeli force in the Sinai consisted of three

brigades that manned the Bar-Lev Line of fortifications

and formed armored reserves. The total strength of the

Bar-Lev Line positions on the Suez Canal was 426

soldiers. Seven artillery batteries and 277 tanks backed this thin Israeli line on the Suez Canal.[50] Significantly, the Israelis also suffered from a doctrinal disadvantage.

The Israeli's spectacular success in 1967 led them to some wrong doctrinal conclusions. The IDF believed their success came from massed armor attacks and the air force. As a result, these arms got priority of resources and dominated doctrinal development. Even though combined arms tactics won the 1967 war, a balanced combined arms doctrine was the unfortunate cost of this air force-armor dominance.[51] In the opening battles of the 1973 war, Israel used armor without infantry or artillery support in piecemeal tactical and operational counterattacks. These attacks failed, denying the Israelis the tactical prerequisites required for operational success. Eventually Israel would regain its tactical superiority through a return to balanced combined arms operations.

Ways. The post 1967 war strategic situation also changed Israeli operational use of attack and defense. The strategic depth gained in 1967 offered Israel new options in this area as it did in others. Israel could still pursue its traditional strategy of strategic pre-emptive strike and operational offense. But now, as a second option, Israel could accept an Arab first strike

26

because of its new depth for strategic and operational defense.[52] Regardless, the choice to attack or defend had to fit with Israel's overall strategic concept.

Three assumptions formed the basis of Israel's strategic plan. First, the Israeli intelligence system would identify an imminent Arab attack and provide ample warning time. Second, the standing IDF would fight a holding action while reserves mobilized. Finally, the Israeli Air Force would win air superiority and help the Army reserves turn the tide of battle on the ground.[53] These assumptions, based on the experience of her previous wars, guided Israel's transition to war in 1973.

Israel choose to conduct a strategic and operational defense to meet the 1973 crisis. However, debate surrounded this decision. The IDF Chief of Staff asked for permission to mobilize reserves and launch a pre-emptive attack. Minister of Defense Dayan refused, allowing only partial mobilization.[54] Thus, Israel gave up its tradition of strategic defense through a pre-emptive strike followed by operational attack. In the 1973 crisis, political constraints directed the operational defense. However, once the reserves mobilized, Israel would change its attack-defense combination.

Her mobilized reserves allowed Israel to return
to strategic defense through operational offense. The
operational defense of the standing army would create
conditions for the attack. Then, Israel's mobilized
reserves could concentrate, attack, and gain the
initiative. This operational offense would begin to
destroy the Arab center of gravity. The IDF's attack-
defense combinations worked with another part of
operational design.

Once again, both the operational defense and
offense used decisive points. In the Sinai, the initial
decisive point was the Bar-Lev Line. Egypt attacked and
seized this decisive point but then stopped in
accordance with her plan. The Line then became a
decisive point for Israel simply because of the antitank
and air defense belt covering it.

As in 1967, the Mitla and Gidi passes also formed
decisive points. Israel's defense of these passes
against the attack of the Egyptian armored reserves set
the conditions for Israel's counteroffense.[55] Another
decisive point in the Sinai was the boundary between the
two Egyptian armies. These two armies had not
completely joined their flanks, leaving an undefended
gap. Once discovered, Israel exploited this point to
cross the Suez Canal and attain operational depth.[56]

The shallow depth of the Golan Heights effected the decisive points on this front. Since holding this line or limiting penetrations created favorable conditions for attack, the Israeli's prepared defensive positions became decisive points. The epic battles near Kunetria and the southern Golan created such conditions. Syrian weakness at these points offered opportunity for Israel's counteroffensive.

Israel's historic battles at decisive points on both fronts led to success. The results of these battles gave Israel a marked advantage, allowing her to attack the Arab centers of gravity. In the Sinai at the Mitla and Gidi Passes, Israeli forces destroyed Egyptian armored reserves. This battle set the conditions for the Israeli crossing of the Canal and the encirclement of the Egyptian Third Army. On the Golan, Israel destroyed the Syrian first echelon and launched its own attack. This Israeli attack forced the Syrian armored reserves to move, leading to their defeat. When these battles on both fronts occurred is another part of operational design.

As in 1967, Israel combined simultaneous and sequential use of forces. Israel committed all of her active duty operational forces concurrently, totally committing the standing army and the Israeli Air Force (IAF). When her reserves mobilized, they moved

immediately to Israel's two fronts. However, Israel designated a main effort which led to sequential operations.

Israel made the Golan Heights her main effort as it had the least depth making it the most vulnerable to penetration. As such, the Golan Heights received priority of air force and reserve resources. Action in the Sinai had to wait for a decision on the Golan. This sequence of operations worked better than Israel expected.

Israel attacked on the Golan Heights to knock Syria out of the war. The Israeli General Staff felt that defeating the Syrian armored reserves and threatening Damascus would achieve this end. Under the Israeli attack, Syria asked Egypt to launch an attack in the Sinai to relieve the pressure. Egypt obliged, moving her armored reserves across the canal and beyond the air defense and antitank missile defenses. Israel destroyed these Egyptian armored forces in front of the Sinai passes. This battle set the conditions for Israel's operational attack in the Sinai.[57] Thus, Israel's sequential use of force produced favorable conditions for both fronts. Simultaneous and sequential operations, as with other elements of operational design, contributed to Israel's success.

Summary

Israel won the War of Atonement only after surviving initial setbacks. Like 1967, Israel benefited from Arab strategic, operational, and tactical errors. Egypt gave up its operational design to meet coalition needs, leading to her defeat. Nevertheless, Israel's decision to forfeit up the strategic and operational initiative resulted in a narrow victory. This decision was made worse by the IDF's acceptance of unfavorable force ratios in her defense.[58] Simply stated, heroic action by Israel's small units saved her from these flawed strategic decisions. In the end however, Israel succeeded through good operational design.

In broad terms, Israel made good use of operational concepts in its campaign planning. The centers of gravity of the Arab forces was correctly identified. Israel recognized the decisive points and wove them into the campaign design. Combinations of attack and defense with simultaneous and sequential operations aided effective use of limited resources. An important lesson for an outnumbered force from the Israeli's 1973 campaign is that gaining the initiative is critical to success.

V.   Conclusions

Where the disparity of strength is so overwhelming
that no limitations on one's objectives will provide
protection from failure...that not even the greatest
economy of strength can lead to success... at that point
the greatest daring, possibly allied with a bold
stratagem, will seem to be the greatest wisdom.
Where success is out of reach, an honorable
defeat will at least grant one the right to rise
again in days to come.

Clausewitz, On War

In 1967 and 1973, Israel demonstrated that an

outnumbered force can beat its larger enemy. Israel's

campaigns accurately aimed at the operational center of

gravity of the Arab armies. The IDF traditionally

sought to gain positional advantage over this part of

the enemy force and then destroy it. Israel knew it had

to destroy the enemy center of gravity to quickly force

a decision. She could not waste her limited combat power

on an enemy force which would not bring victory.

Therefore, Israel looked for ways to get at the Ara

center of gravity.

Decisive points provided Israel the positional

advantage it needed to threaten the Arab center of

gravity. The IDF identified these points to mass

its combat power to gain relative superiority and

isolate that enemy force that would not influence the

decision. Further, the IDF picked decisive points on an

indirect approach that provided her smaller force with

some protection. Israel was then positioned to destroy

the enemy center of gravity through attack or defense.

Israel's 1967 and 1973 wars are good examples of combinations of the attack and defense, taking advantage of the strengths of both forms. The attack-defense combinations helped Israel gain the initiative. With the initiative, the Israel could set favorable conditions for battle.

In 1967, Israel knew that war with her Arab neighbors was imminent and had set clear strategic goals. Israel conducted its strategic defense with operational attack. This crucial decision allowed Israel to gain the initiative from the outset of war. Within the operational offense, Israel combined attack and defense. The Northern Front defended while Southern command attacked. Further, Southern Command combined forms, attacking to penetrate Egyptian defenses, then racing to the Sinai Passes to defend. Combining forms allowed Israel to mass combat power at the decisive point, also providing economy of force in other areas. Israel was lucky that in 1967 the strategic setting allowed it to choose the form of war it wanted.

In 1973, however, the Arabs surprised Israel. The Arab attack gained the initiative, forcing Israel to initially combine strategic, operational, and tactical defense. The Israeli General Staff, however, knew it had to gain the initiative through a combination of defense that transitioned to the attack. Israel's forces on the Golan Heights attacked while her Sinai

front defended. Eventually, the IDF took the operational offensive on both fronts. The transition of attack and defense encompassed the use of Israeli forces over time.

Israel's campaigns included simultaneous and sequential operations. Just the fact of being a small force meant that none of Israel's potential combat power could lay idle. All her available force played an active role in the campaigns. This way Israel could develop mass for use at the decisive point.

Israel, like any outnumbered force, needed to fight a short decisive war. Simultaneous use of all forces available helped Israel to win an early decision. However short the war, a modern conflict, like the Arab-Israeli wars, will consist of more than one battle.

A single battle is unlikely to decide a modern war. Therefore, the operational design must use sequential operations to create favorable conditions for future battles. Overall, the outnumbered force must balance simultaneous use of available force with sequential operations.

Implications

In order to win, the outnumbered force, like any force, must balance ends-ways-means in its campaign design. The campaign design, made using the elements of operational art, helps insure the effective use of

limited means. The operational planner must recognize
the following implications of fighting with limited
force:

* The campaign must strive to reach a quick,
decisive end. A smaller force cannot conduct a long war
of attrition. In other than a short war, numbers do
count. This is not to say that the small force avoids
combat. Rather, its creates the conditions for a
sequence of decisive battles to destroy the enemy center
of gravity.

* A clear, unambiguous strategic goal simplifies
campaign design. When strategic guidance is unclear,
the campaign will run more risk.

* The smaller force must try to achieve surprise.
Conversely, it cannot allow the enemy to achieve
surprise.

* The outnumbered force must gain and keep the
initiative. This allows it to set favorable conditions
for battle.

* Geography will affect operational depth.
Restricted military geography will compress operational
depth. In this case, the spheres of strategy,
operations, and tactics begin to overlap. Where there
is limited depth, the outnumbered force must transfer
operations into the enemy depth. Once in operational
depth, a small force can create big effects.

*   The small army must have tactical excellence.
Once in battle, the small force must defeat the enemy
through superior tactics.   The small force must employ
the coordinated, violent use of concentrated combat
power.

Twice in ten years, Israel defeated larger armies
attacking her from many directions.   In doing so, she
demonstrated that an outnumbered force can fight and
win.   Israel showed that an outnumbered force needs
excellence in all facets of war, from strategic guidance
to tactical execution.   The likely consequence of
failure in any of these areas by an outnumbered force is
defeat.   This includes the use of operational art and
theoretical concepts in campaign design.   Operational
design provides the essential link between correct
strategic goals and superb tactical execution.   As
Israel showed, a small force can beat the odds.

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APPENDIX A

ARAB FORCES

Arab Military Capabilities on 5 June 1967 (Collated
Estimates)

Air Power (Operational Combat Aircraft Only)

	Egypt	Syria	Iraq	Jordan
Mach 2 first-line fighters (MIG-21)	125	36	48	—
Other supersonic Aircraft (MIG-19/ SU-7)	80	—	12	—
Subsonic fighter-bombers	110	40	80	21
Light bombers (Il-28)	40	—	10	—
Medium bombers (Tu-16)	30	—	6	—

Ground Forces (Operational and Deployed Only)

	Egypt	Syria	Iraq	Jordan
Combat and first line support troops	100,000	65,000	20,000	55,000
Battle (and medium) tanks with guns of 75mm and above	900	300	200	300
Other armored vehicles mounting guns (except AA)	200	50	—	30+
Artillery weapons (excluding infantry mortars and light anti- aircraft guns)	900	300	—	100

Chart from Luttwak and Horwitz. The Israeli Army, 1948-
1973. Lanham, MD: University Press of America, 1975, p.
222-223.

ISRAELI DEFENSE FORCES

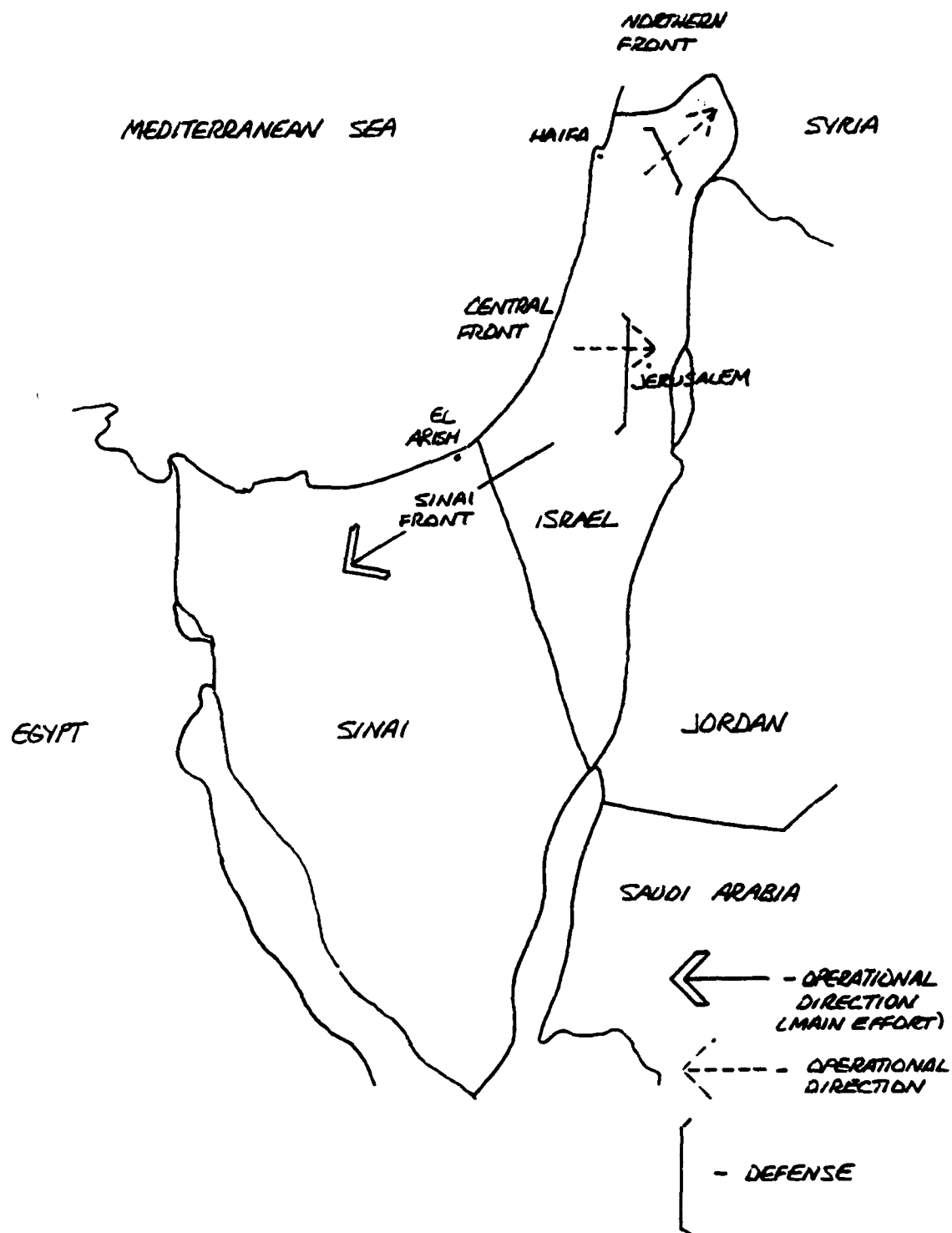Unofficial Estimates of Israeli Troop Deployments in 1967.

Total Strength of Israeli Defence Force	I.S.S Press Release 6 June 1967	N. Safran From War to War
Troops strength (fully mobilized	275,000	275-300,000
of which:		
1. Ground force total	No Estimate	250-265,000
2. Conscripts and career professionals of the standing forces	No Estimate	71,000
Total number of brigades	31	24-26
Local Defence Units	No Estimate	Equivalent of 14 Brigades (70,000)

Ground Forces by brigade type

Armored (3,500 men each)	8	11
Paratroops (4,500 men each)	1	4
Infantry (4,500 men each)	22	9-11

Chart from Luttwak and Horowitz. The Israeli Army, 1948-1973. Lanham, MD: University Press of America, 1975, p. 217.
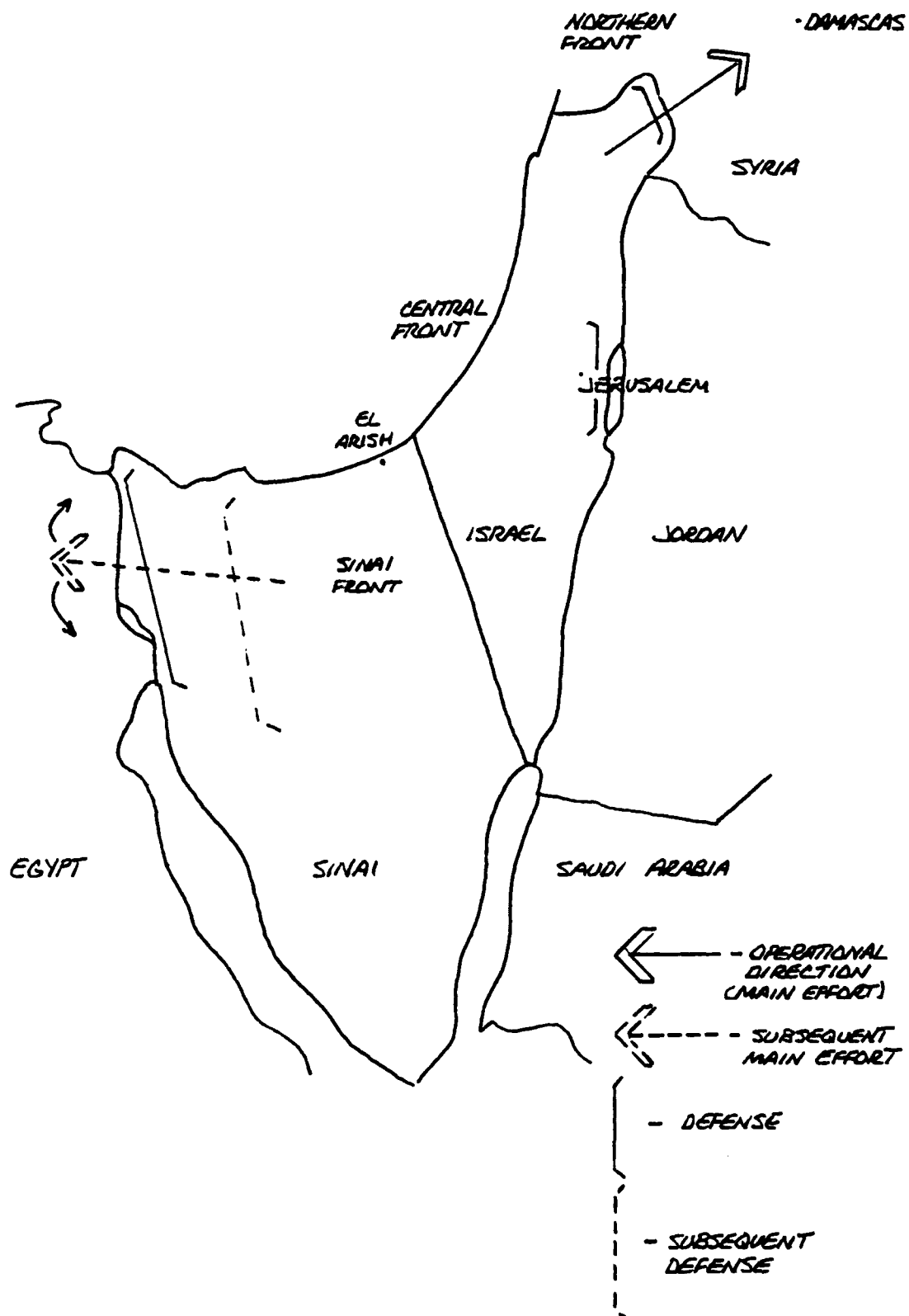
APPENDIX B

NORTHERN
FRONT

MEDITERRANEAN SEA

HAIFA

SYRIA

CENTRAL
FRONT

JERUSALEM

EL
ARISH

SINAI
FRONT

ISRAEL

EGYPT

SINAI

JORDAN

SAUDI ARABIA

— OPERATIONAL
DIRECTION
(MAIN EFFORT)

←---- — OPERATIONAL
DIRECTION

— DEFENSE

THE CAMPAIGN MATRIX

LEVEL

		Strategic	Operational	Tactical
F				
R	Sinai	Defense	Offense	Off/Def
O				
N	Golan	Defense	Def/Off	Def/Off
T				

Def – Defense
Off – Offense

Def/Off – Indicates sequence

APPENDIX C

NORTHERN
FRONT

•DAMASCAS

SYRIA

CENTRAL
FRONT

EL
ARISH

JERUSALEM

SINAI
FRONT

ISRAEL

JORDAN

EGYPT

SINAI

SAUDI ARABIA

OPERATIONAL
DIRECTION
(MAIN EFFORT)

SUBSEQUENT
MAIN EFFORT

DEFENSE

SUBSEQUENT
DEFENSE

THE CAMPAIGN MATRIX

LEVEL

		Strategic	Operational	Tactical
F				
R	Sinai	Defense	Def/Off	Def/Off
O				
N	Golan	Defense	Def/Off	Def/Off
T				